

## CHANGING ROLES OF NEW KNOWLEDGE<sup>1</sup>

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### New Knowledge and Social Reform

Intellectuals have always sought to influence their societies. Priests, literati and lawyers disputed for centuries with warlords, princes and noblemen for positions of prestige, authority and decision. They also

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fought among themselves. The arrangements resulting from these disputes describe, in broad terms, the value contents and orientations of past and present civilizations<sup>2</sup>. Modern times brought to this arena a new type of intellectual, claiming to have the definite credential for his power aspirations: the new knowledge, buttressed by the certitudes of science. In Western Europe, the new intellectuals were part of broad social movements that did away with much of the traditional order and brought about the modern world. Because of this association, the values of empirical knowledge, the use of reason, individual freedom, social justice and the conquest of nature appeared to come together: they were all modern and progressive<sup>3</sup>.

The proponents of the rationalist faith had to fight the intellectuals of the old type for the supremacy of their own natural philosophy; and to prove to power holders and emerging groups how valuable science could be to them. The powers of science have been traditionally argued for in two ways. The first belongs to the stream of thought of modern economic and political liberalism. It argues for freedom of thinking and individual research, and for the elimination of institutional and moral barriers to individual free thinking. Individual scientific rationality is supposed to add up to a rational and efficient society, the same as individual economic rationality is supposed to add up to a rich and prosperous economy. Classic economics is, in this context, the social science of choice. It shows how individual rationality (and egotism) is the true foundation for social bliss, and thus provides a rationale for the economic, social and political values of liberalism.

The other view is most decidedly French. *Liberté* is nothing without *Egalité* and, more to the point, *Fraternité*. Fraternal solidarity and social justice cannot be expected to flow naturally from individual self-interest, but requires an active and interventionist state, to be run according to the tenets of modern science. August Comte's Positivism carries this notion to its natural conclusion: that the powers of science are not limited to the understanding and mastering of nature, but are also to be extended to the organization of society. Its aim is to produce a blueprint for the organization of society, to which the individuals should comply. Sociology, the science of society, is thus destined to be the science of sciences. In its Durkheimian version, social facts exist on their own, and individuals are compelled by them in their behavior.

Positivists were evolutionists, and for them, society had still to be brought to higher levels of rationality. This was to be obtained through the discovery of laws, mechanisms and technical procedures that would uncover a future which was pre-ordained by the evolutionary process. In this special sense, positivist evolutionism incorporates history. Politics appears in the positivist perspective as a conflict between light and darkness, science and ignorance. Political life is not seen as an interplay of different groups with their

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<sup>2</sup> Max Weber's *Economy and Society* (Weber, 1968) is, in great part, an attempt to look at civilizations from this standpoint.

<sup>3</sup> For the links between modern science and rising social sectors, see Ben-David, 1971.

own legitimate values, preferences, and rights. There is no place for commonly accepted "rules of the game". There is no game to be played with fairness, only a war to be won.

The French tradition reserves a place for intellectuals in political life the other tradition lacks. It is probably for this reason that this version of scientific enlightenment spread out much more easily than the English version, which required a much less visible State. And, in spite of Comte, it was not sociology, but the first modern professions, engineering and medicine, which first embodied the projects of scientific social reform in many societies. This was certainly the case of Brazil, as we shall see in some detail below. And it is quite likely that other countries followed similar paths.

Historians, rightly so, have usually dealt with the introduction of modern, scientific and technological ideals and values in Latin America as a chapter of the worldwide expansion of European enlightenment. What is seldom perceived is that, as the social contexts in Europe and elsewhere differ so much, the meanings attached to the new ideas, above all their social implications, are also different.

Expressions like "intellectuals", "modernization", "conservatism", "ideology", and the like, are obviously inappropriate to account for the complex processes we are dealing with here. Well-educated people play different social roles at different times and places, and it is good to have adequate concepts to account for these changes. Thus, the word "intellectual", in a broader sense, refers to persons who have received a substantial amount of formal education; more narrowly, however, it is identical with "intelligentsia", and it refers to a special role played by these persons in some circumstances, namely the one of trying to formulate and spread out broad interpretations, Weltanschauungs of their times and societies. The intelligentsia typically spreads its word throughout society, and their ideas are weapons in political struggle. In other circumstances, however, they stay close to the elites, try to influence the education of the powerful, and lend their competence to the running of society. In modern times, they are called "technocrats". They can also just keep to themselves, trying to carve out a place in society where they work and live according to their own values and standards, without necessarily leading the others. This is typically the "professional" role, which very often assumes the characteristics of the liberal professions - independent, self-regulated and privately organized professional groups. Finally, the educated can also be restricted to low paying, relatively non prestigious salaried work; in these circumstances they may call themselves "intellectual workers", or simply white-collars.

The different roles played by the educated can have at least two broad implications for their societies, one political, the other more epistemological. The political implications have been recently very present in the social sciences, with a tendency to challenge the conventional wisdom that links modern knowledge with social and political freedom and enlightenment. Instead of being an instrument for human improvement, knowledge and its related institutions - formal education, scientific thinking, modern technology - are presented as just another weapon of human oppression and social control. What the text below hopefully demonstrates, however, is that knowledge can be used for very different, and often contradictory social purposes. In the name of "progress", it can appear in extremely technocratic and authoritarian political

arrangements; by the same token, democracy and popular participation can be sometimes linked with extremely conservative political arrangements.

The value contents carried by the words "conservative", "authoritarian", "progressive", and so forth, have a direct linkage with the epistemological questions that tend to be pushed aside by some over-politicized view of the roles of knowledge in society. It is of course impossible, today, to attach an unequivocal positive sign to the development of science-based knowledge and the political strengthening of their carriers. It is still valid, however, to ask about the conditions which facilitate intellectual competence and those in which knowledge is just a cover for power play.

In some conditions, for instance, engineers can play different social roles, as intellectuals, technocrats, or professionals; and they can also be competent or incompetent engineers. These are two independent questions, which require different explanations, and can have profoundly different social implications in their combined manifestations. We should keep these distinctions in mind as we take a bird's eye view of the ways in which modern knowledge arrived in a strange land, Brazil.

### **Scientific enlightenment**

Technical and scientific knowledge emerged in Europe as part of the ideology of new, emerging social groups; it was part of the general tendency towards increasing political freedom and political participation, both in its British and continental versions. In Latin America, the new ideas were only accessible to a tiny group, which had to confront local elites trying to gain access to power positions through the traditional channels of legal and religious education. It is therefore not surprising that the usual standards of "progressive" and "conservative" orientations did not apply to the bearers of the modern ideals. A case in point was José Bonifácio de Andrada, the central figure in the Brazilian independence movement and fully conversant with the European pragmatic outlook of his time. He was certainly progressive in his projects of organizing a modern state, bringing an end to slavery and introducing a modern university in Brazil. These goals, however, were incompatible with an open political system which would consolidate the current state of affairs. Faced with the realities of political life, he would end up working with groups which did not share his social and economic outlook, being finally being forced out of power and influence<sup>4</sup>. Andrada's plight anticipate the fate of a large succession of intellectuals who could never put together their scientific enlightenment with the political realities in which they lived.

When circumstances forced the Portuguese court to come to Brazil in early nineteenth century and grant the old colony its de facto independence, they were quick to create a military engineering school in Rio de Janeiro. They created also two medical schools, one in Rio and the other in the old colonial capital of

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<sup>4</sup> Cf. Costa, 1985, specially chapter 2

Salvador, Bahia, and allowed for the beginning of two law schools in the provincial capitals of Recife and São Paulo<sup>5</sup>.

Little is known about the reasons for these choices of subject and places, but there is some room for speculation. In the previous centuries of colonial rule, the Portuguese had not allowed for the creation a Church controlled University in the New World, which has been the pattern of the Spanish colonies. The relationships between the Portuguese State and the Church have been always symbiotic but conflictive, and in the 18th century the Jesuits had been forced out from the control they held on Portugal's main educational institution, the university of Coimbra. There was never an open break with Catholic faith and orthodoxy like the Reform movements in many other West European countries. Everybody was (and, in Brazil today, still is) officially a Catholic, and the Church played a central and irreplaceable role in the education of the young, in the rituals of passage and as the sole source of valid (if hardly followed) moral code. A priestly life, however, was hardly a career of choice for the elite; it was rather a second-best alternative for bastards, those of mixed blood and other outcasts, and this reinforced its relatively low status. The elite preferred to send their sons to the law schools, and the extremely complex organization of the Portuguese patrimonial bureaucracy seemed to guarantee employment for all.

The distribution of the new educational institutions in the Brazilian territory early in the 19th century tells something about how priorities were changing. The transfer of the Portuguese Crown to Brazil under British protection and French pursuit was the lowest point in Portugal's history since the glorious years of the discoveries in the 15th and 16th centuries, and this sheer military weakness certainly explains the priority given to the military schools in Rio de Janeiro. The second priority was medicine and surgery, both for military reasons and because of the usually appalling health conditions prevailing in those times. Bahia was the country's largest city and the most important after the capital, and it was befitting that it would be the seat of the second medical school. A law education was probably still seen as the best mobility channel for the children of the local gentry in decadent Recife and stagnant São Paulo, and they got the law schools they longed for.

If these were the priorities in the minds of those surrounding the exiled Portuguese King, the pattern did not remain unchanged or unquestioned in the years to follow. The law schools in Recife and São Paulo moved away from the dominance of canonic law and the traditional Portuguese codes and started to receive the influx of different strains of European liberal thinking; the military academies developed into engineering schools which provided fertile grounds for the scientific values of Positivism; and the medical profession, stimulated by their newly discovered efficacy against tropical diseases at the turn of the century, developed its own messianic aspirations.

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<sup>5</sup> For a history of Brazilian educational and scientific institutions see Schwartzman, 1979 and 1982.

These developments were not exclusive to Portugal and Brazil. Spain had also expelled the Jesuits from its Empire in the 18th century, and made an effort of *aggiornamento* which would reach the colonies and remain influential after the years of independence<sup>6</sup>.

### **Engineering Enlightenment**

The notion that society could be planned and ruled by engineers was well within the French tradition, and would have a large impact in Brazil. While in the British tradition engineering has always been a minor and ungentelemanly occupation, the École Polytechnique was since its inception the place where the French elite was to be educated. There, military education came together with the training of the mind in mathematics and physics, and it was thought that this combination would prepare the best of Cartesian minds, ready to build bridges, run armies and rule the economy.

The way the old Rio military school changed its names and goals during the 19th century is a good indication of its perceived roles. When it was established in 1810 as the Royal Military Academy, it was supposed to provide "a complete course on Mathematical Sciences and the Sciences of Observation, including Physics, Chemistry, Mineralogy, Metallurgy and Natural History including the Plant and Animal Kingdoms and the Military Sciences in all its extent, including both Tactics and Fortifications and Artillery"<sup>7</sup>. The military profession never enjoyed too much prestige in Brazil except at the southern frontier, and the civilian dimensions of the school always prevailed. In 1858 the Military Academy changed its name to Escola Central, and finally in 1874 it adopted the French denomination of Escola Politécnica.

The fact that civilian engineering was dominant did not mean that the School was particularly competent as a place for the development of mechanical or construction skills, or the stimulation of competence in the physical and natural sciences. Contemporary visitors were unanimous in criticizing the way teaching was conducted: the adoption of outdated text books, the absence of practical or experimental classes, the almost total absence of independent research work. This was probably just as well for the limited technological needs of Brazilian society at the time. The Escola de Minas de Ouro Preto, a mining school created under French supervision in Minas Gerais in 1875, did not fare much better on the long run in spite having started under far stricter standards; Minas Gerais' soil was rich, but there was never to be an economic basis for a mining industry requiring the talents the Escola de Minas was supposed to train<sup>8</sup>. Only in São Paulo, where the local Escola Politécnica was created in 1894 to follow closely the expansion of the railroad system into the coffee country, was a more technical and specialized education actually achieved.

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<sup>6</sup> Safford, 1976.

<sup>7</sup> Carta de Lei" of April 4, 1810. Quoted in T. G. Franken, 1979.

<sup>8</sup> . Carvalho, 1978.

What gave meaning to the Escola Politécnica in Rio de Janeiro (as well as to the Escola de Minas and, to some extent, to the Politécnica in São Paulo) was their role in the creation of a new breed of elite intellectuals, who could challenge the established wisdom of priests and lawyers in name of modern science. Positivist doctrine provided the engineers with the assurance that they had the right and competence to rule society, which would be better and more civilized under their rule. They campaigned against the Monarchy, in favor of universal education and for better salaries for the working class, they opposed the Church and all forms of corporatist organization (and universities, with their values of self-regulation, were perceived as one of them), opposed mandatory small-pox inoculation and, above all, organized themselves in secret societies and conspired for power. They were so successful that their slogan, *Ordem e Progresso*, is still today engraved in the Brazilian flag.

Positivism was just the first and more obvious manifestation of the tendency of those related to technology and the hard sciences to assume that they had the right and the competence to lead society. The military, which remained throughout the 20th century as a kind of second-class engineering career, were the ones who held more strongly to this ideology; and they did it predominantly in the less technically oriented Army, rather than in the new and technically more sophisticated Navy or Air Force services. The culmination of this perspective within the Brazilian military was the development of the so-called "Doctrine of National Security", which was taught at the Escola Superior de Guerra in Rio de Janeiro during the Cold War, and provided the justification for the military seizure of power in Brazil from 1964 to 1984. As a closed, comprehensive, and largely formalistic interpretation of society, the Doutrina shows some striking similarities with the Parsonian view of the social system, which may not be a simple coincidence, given the number of Brazilian officers who came to study in the United States after the Second World War (how Parsonian sociology entered the military training institutions, if it really did, is something well worth investigating). What was distinctively non-Parsonian was the placement of the military organization as the irreplaceable guardian of the "National Permanent Objectives", which were supposed to exist, to be accessible to scientific understanding, and to prevail over eventual preferences resulting from the vagaries of the political process or the whims of elected authorities.

Marxism in Brazil was very much also an outgrowth of the engineering and military traditions. Translated into French, away from the organized labor movements and stripped from its Hegelian underpinnings, Marxism can easily be taken as just another form of Positivist evolutionism. In the beginning of the 20th century some Italian and Spanish immigrants brought to Brazil the ideals of working-class organization. Anarchism prevailed among them, and some adhered to tenets of Scientific Socialism and Communist Internationalism. The Brazilian Communist old-guard would be completely overpowered, however, by the military group headed by Captain Luis Carlos Prestes in the 1930's. Prestes had been a famous military rebel in the 1920's who was recruited to the Communist movement while in exile in Buenos Aires. In the early thirties he was able to convince the Soviet Union, and the Comintern, that a Communist take-over was imminent in Brazil under his leadership. The Communist uprising of 1935 was mostly a military fiasco which is better told as an episode of Latin American fantastic realism, were it not for its aftermath of

violent political repression and fascism<sup>9</sup>. One of its consequences, in any event, was that Prestes and the group of young lieutenants surrounding him in 1935 remained in control of the Communist party in Brazil until well into the seventies, in fact fending off the emergence of an alternative Marxist trade-union or intellectual leadership, some illustrious names notwithstanding.

Engineers have also tried to rule things more directly, through the management of the human habitat, the cities. The creation of Belo Horizonte as a new capital for the old state of Minas Gerais, which was to be reborn with the advent of the Republic, remained as a symbol which was to reemerge when an old mayor of Belo Horizonte, Juscelino Kubitschek, decided to restart Brazilian history with the construction of Brasília. Early in the century Brazil went through its most significant experience of urban renewal, the transformation of Rio de Janeiro into a French-type city under governor Pereira Passos. Historians are only now starting to examine how these experiences proceeded, which were their assumptions, and how people would fit, or not, into the drawings which came out of the engineers' boards. The three experiences shared at least one characteristic, namely the notion that there was a plan to be followed, straight lines to be traced in the real world, and that people should be brought - convinced, educated, or simply forced - to comply with them. In Belo Horizonte, built in an empty region, the only obstacles were the hills, which did not adhere too willingly to the squares and triangles of architect Aarão Reis, not by chance a Positivist educated at the Rio de Janeiro Politécnica. The Mineiros learned the lesson, and built Brasília on a plateau. In Rio de Janeiro the old, dirty and crowded Portuguese city was torn apart, people forced out of their houses and expelled to the far-away suburbs. There as elsewhere, modernization became a synonym with authoritarianism and violence<sup>10</sup>.

Brasília is a reminder that in no area was the paradoxical links between engineering enlightenment and political authoritarianism more striking than in Brazilian modern architecture. Brazil entered the world of modern architecture in the darkest years of the Estado Novo, when the country was experimenting with ideas of totalitarian power that seemed to prevail in Europe. For the young military who shared power with Vargas after 1930, both the Soviet, the German and the Italian regimes seemed equally fascinating, and not too different from each other. After the Communist uprising of 1935 only the Fascist examples became accepted, with Franco in Spain and Salazar in Portugal providing models that were followed with interest and curiosity. A powerful, modern country on the make needed big constructions, and Le Corbusier

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<sup>9</sup> Morais, 1986.

<sup>10</sup> The forced modernization of Rio de Janeiro was directly inspired in the renewal of Paris by Haussman, and had in many ways similar implications. For a broad discussion on urban modernization and its meaning, see M. Berman, 1982. For Rio, see Needell, 1983 and 1984.



disputed with Italian Marcello Piacentini the privilege of building the University City in Rio de Janeiro<sup>11</sup>. Le Corbusier and his Brazilian associates, headed by Lúcio Costa, were defeated, but had later the opportunity to build the seat of the Ministry of Education in downtown Rio de Janeiro, while the plans for the University City never materialized. This dispute, which could be seen a simple confrontation between professional groups and architectural styles, was carried on much broader grounds. The conflict between Le Corbusier's suspended gardens and highways and Piacentini's Roman columns is presented as the very conflict between fascism and socialism.

The construction of the Ministry of Education building by the Lúcio Costa team (of which Oscar Niemeyer as a member), based on Le Corbusier's sketch and with its Picasso-like panels by Cândido Portinari, gave to the Vargas regime and his Minister of Education, Gustavo Capanema, an aura of progressivism and even leftist liberalism they never had or intended. Writing in 1945 about this building, Lúcio Costa would call it "a beautiful and pure flower - a spiritual flower, foretelling the future to which we are going with certitude (. . .) - and which will be not only more human and socially more just, but also more beautiful<sup>12</sup>. While the big projects were being discussed in Rio the mayor of Belo Horizonte had Niemeyer and Portinari projecting and decorating the buildings around the Pampulha lake. Later, Lúcio Costa was to write the master plan for Brasília, Niemeyer was to project its buildings, and they all promised that the modern architecture in the new city would be the beginning of a new era for Brazil (Portinari, unfortunately, had died some years before of lead poisoning).

The *Politécnica* also generated entrepreneurs. Brazilian capitalism in São Paulo grew mostly from a combination between coffee plantation money and the drive of European immigrants. The Engineer coming from Rio *Politécnica* was a different breed. He had enough competence to know where the country's mineral riches could be found, or which kinds of big projects the government could be interested in undertaking. He would know French, sometimes German and English, and could deal with foreign capitalists and governments. He had also the proper family names and contacts to get the licenses, authorizations and concessions needed for their projects. This kind of entrepreneur was very much a supporter of free enterprise, but could only thrive in the shadow of the State. This "neo-mercantilist" association between the State and private interests was not, of course, anything new in the Brazilian-Portuguese tradition of patrimonial administration. But it certainly brings to the common image of a capitalist entrepreneur some unusual connotations.

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<sup>11</sup> The University of Rio de Janeiro, under the name of Universidade do Brasil, was to be the model which would pattern all higher education institutions in the country. Almost all the energy, however, went into the physical planning of its buildings, with very little in terms of its substantive contents. Cf. Schwartzman, Bomeny and Costa, 1984

<sup>12</sup> . Letter to Minister of Education Gustavo Capanema, quoted by Schwartzman and others, 1984, p.94.

A final outgrowth of the Politécnica tradition were the physical sciences. Mathematics, physics and astronomy all started together in Brazil within the Rio Politécnica, thanks to a few talented individuals who benefitted from their close contacts with France. They first tried to open an intellectual and institutional space for pure research, free both from the practicalities of engineering and from the political and intellectual constraints of positivism. They argued against the shortsightedness of professional education, wrote complex papers showing the scientific errors of Positivism, and became involved in the organization of the country's first universities in São Paulo and Rio de Janeiro. Modern science and mathematics was for them a necessary ingredient of modern culture, and they wanted to add this element to Brazil<sup>13</sup>.

The Second World War would change all that. The new generation of young physicists formed by the foreign professors at the University of São Paulo in the thirties and early forties assumed they had a much more important role to play. They followed the developments of nuclear energy, read about Frédéric Joliot-Curie in France, the role of socio-economic planning in transforming the Soviet Union in a world power, and saw their role as bringing to Brazil the powers of nuclear energy and the benefits of socio-economic planning. For some, this led directly to political militancy in Communist or socialist political parties; for others, it led to participation in ambitious, and often frustrated government projects in the field of advanced technology. They became also involved in efforts to transform the Brazilian universities into science-based institutions, open for all, democratically ruled, and highly involved in the solution of the country's pressing problems<sup>14</sup>. Because of their identification with the left, several of the best-known of these scientists clashed with the military government in Brazil after 1964, and had to go into exile. They would share, however, the nationalist orientation that the military also embodied, and saw the creation of a Ministry of Science and Technology by the civilian government in 1985 as their vindication.

### **Better to prevent than to remedy**

The notion that the medical sciences should move from its healing role to a more social, preventive one, became well established in the Brazilian medical circles in the 19th century<sup>15</sup>. Previously, the doctor or healer dealt mostly with individuals who sought their help, and could afford to pay for their services. Global epidemics - the plagues, leprosy, the pox, venereal diseases - were to be handled by the public and religious authorities, isolating the carriers, comforting the dying and exhorting the healthy not to live in promiscuity. At the turn of the century, probably for the first time in Brazil, doctors were asked to explain the causes of the illnesses of Rio de Janeiro as a city, and to suggest measures to cure them. They found problems with the air, the architecture, the supply of foods to the population, the social morality. Their

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<sup>13</sup> Costa, 1971.

<sup>14</sup> Schwartzman, 1985.

<sup>15</sup> The following is based on Machado and others, 1978.

recommendations were mostly urbanistic, legal and moral, rather than strictly medical, and required the approval of higher authorities. In the next decades, however, they would try to play a larger role.

In 1839 a dissertation called "Medicine contributes to the improvement of morals and the maintenance of good customs" already spelled it out in all its details. The idea was, in short, that "for the health of a population to be preserved, a society should be created where passions are not aroused, where chaos has been undone, where order dominates, where everything works, where there are no monsters, where customs are gentle. Medicine, which knows men and the disturbances that disorder create in his organism, should lead the organization and functioning of this society, showing the causes of perturbation and interfering to redress them. It offers the knowledge of the body, which should be spread out throughout society, so that each person can avoid passions and disorder, and this should be the basis for the work of the social body. This is the dream of doctor's republic, where everything is order, calmness, light; where equilibrium prevails. Temperance, continence, moderation of behavior, tranquility of the soul - they are virtues which oppose turbulence and disorder in behalf of life; and these virtues require a society which makes them possible. Medicine studies the impact of society, government, freedom, slavery, religious beliefs on men - and, according to the functional alterations they can create, it makes the appropriate recommendations for equilibrium"<sup>16</sup>. The Sociedade de Medicina do Rio de Janeiro, established in 1829, would work persistently to bring society under the scientific supervision of the medical profession and, at the same time, would fight with all its powers against all non-established forms of medical work, from homeopathy to traditional medicine.

It is probably fair to say that the medical profession never had, in Brazil, the same power as the engineers to put forward their ambitious propositions. One explanation is that the market for medical private practice was always better than for engineers, and the doctors could adhere more closely to the canons of a liberal profession. Only those doctors more related to general hospitals, sanitary medicine and the military would attempt a broader role. Their highest achievements occurred in the beginning of the 20th century, when specialists in sanitary medicine joined hands with the engineers for the reorganization and sanitization of the urban space, more specifically in Rio de Janeiro. As the city was torn apart by the large avenues, the houses were invaded in search for stagnant waters and the population was forcefully brought in for smallpox shots. The riots that ensued, which became known as the "Revolta da Vacina", bear witness to the violence to which the population was submitted<sup>17</sup>.

If doctors as an organized group never held too much power, they came much closer to the social sciences than the engineers, and had an important role in shaping the country's dominant social ideologies. Physical anthropology appeared in Brazil as a branch of legal medicine. Nina Rodrigues, from the Bahia School of

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<sup>16</sup> Machado and others, 1978, 197-198.

<sup>17</sup> Carvalho, 1987.

Medicine, worked at the turn of the century with biological theories that looked for links between physical shapes and criminal behavior. This literature led directly to questions of racial qualities of the Brazilian population, the problems of racial miscegenation and degeneration. Explanations for the troubles with Brazilians - laziness, luxury, lack of discipline - moved from the old environmental explanations to the new, biological and presumably more scientific theories<sup>18</sup>.

The diagnosis for the causes of the Brazilian's troubles had to be followed by treatment. Eugenics became an important issue in Brazilian medical circles, and in 1929 the first Brazilian Congress of Eugenics was held in Rio de Janeiro, with participants from several Latin American countries, it was followed by the establishment of a Brazilian Commission of Eugenics in 1931<sup>19</sup>. Interventions were called in many areas, from pre-nuptial examinations for the control of venereal diseases to the sterilization of the alcoholic, syphilitic and schizophrenic. For some, the Brazilian racial stock was expected to improve on the long range thanks to the superiority of the white race. Others, less "optimistic", claimed for strict limitations on racial intermarriage. All required the screening out of immigrants from Asia and other inferior races, and favorable migration laws for Western Europeans<sup>20</sup>.

Eugenics and race ceased to be legitimate subjects for the Brazilian intelligentsia after the Second World War. The extraordinary advances of curative medicine during and after the war years, combined with the very success of the sanitary and epidemiological campaigns of the previous decades, left the medical profession without a specific social and ideological platform. This situation started to change in the seventies, with two simultaneous developments. The first was the progressive erosion of medicine as a liberal profession, as the number of doctors increased, the costs of medicine went up, and a large system of curative medicine was created by the government social security system. The second was the return, in the urban centers, of contagious diseases that seemed to have been eliminated in the previous years. The new generation of Brazilian medical doctors is very different from the old one. They work as employees in public health services or large health companies; they are strongly unionized, and go often on strike for higher wages; they are probably less well trained, on average, than before; and have an acute notion that the health problems they face in everyday life are not basically biological, but social and economic. In spite of their renewed politicization, it is not likely that they would try, as they did at the turn of the century, to

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<sup>18</sup> Rodrigues was a prolific writer, and left a large group of followers, the best known being probably Artur Ramos (Ramos, 1939). The gist of Rodrigues' concerns is given by the title of a book he never concluded, "La Degenescence Pshychie et Mentale chez les Peuples Métais des Pays Chauds". One of his best-known books is *The Africans in Brazil* (Rodrigues, 1945).

<sup>19</sup> Stepan, 1984.

<sup>20</sup> Nancy Stepan observes that Eugenics in Brazil tended to have a strong Lamarckian component, allowing for "optimistic" theories on long-range racial improvement for the Brazilian population.

carry the flag of social reforms. They see themselves mostly as intellectual workers, part of an growing intellectual proletariat, and act accordingly.

### **Law and the legal professions**

In the beginning, social sciences were indistinguishable from Law. In the Portuguese administrative tradition, there was never a clear distinction between the executive and the judiciary branches, and legislative bodies, when they existed, tended to be weak and subordinated to the central government. To go to a Law school and get a degree did not mean to get a specialized profession in a differentiated labor market. For those who could, it meant mostly to be socialized into the country's political elite, and be prepared to occupy the positions in government which could be secured through political and family ties. This does not mean, of course, that there were no jobs requiring specialized legal training and credentials, nor careers based on strict legal competence and professionalism. But Brazilian lawyers moved fairly easily between public and private offices, and would rather stay with the former if they could.

One consequence of this close proximity between Law and government was the development of Administrative Law as one of the most significant fields of study in the Brazilian law schools. Administrative Law was, in one sense, a kind of legalistic approach to public administration, in which the formalities of written rules were the only elements or reality which counted. In a more doctrinal sense, administrative law dealt with that peculiar situation in which one part in a legal contract, the government - had not only more rights than the other - the private person - but also controlled substantial parts of the legal system which was supposed to settle eventual conflicts of interest. Given the disproportionate size of the Brazilian state and its involvement in so many aspects of the citizens' life, administrative law was a good specialization for a lawyer to work on; and gave also an easy access to the other side of the fence, when legal devices had to be devised on the State's behalf.

The second specialty developed by a small group of Brazilian elite legal scholars was the General Theory of State, a more traditional version of modern Political Science. Specialists in State Theory became also known in Brazil as "Constitutionalists", by their ability to propose legislation affecting the basic legal foundations of the country's political organization. Brazil had enough constitutional changes to keep a handful of competent constitutionalists busy (1824, 1891, 1934, 1937, 1945, 1967, 1987, and several constitutional amendments in between). They would also function as advisers to influential political groups in periods of political crisis, and come up with legal formulas to adjust for eventual transitions. A deep study of the constitutionalists and their role in Brazilian politics is still to be made. It is worth mentioning, however, the name of Francisco Campos, strongly influenced by German legal thinking and fascist sociology, who wrote the Brazilian authoritarian constitution of 1937 and was present again when the military needed a military formula for the coup d'état in 1964; or Afonso Arinos de Melo Franco, who participated in the Brazilian Constitutional assemblies of 1934, 1946 and was elected as a Senator for the

Constitutional Assembly of 1987, after presiding over a National Commission responsible for making a first proposal for the country's new constitutional chart.

Lawyers were therefore politicians, professionals or high-level technocrats, but seldom intellectuals. Law schools, however, have also been famous as centers for student political activism, an old Latin American phenomenon which far predates similar processes in Europe and the United States. In some Latin American countries, these movements were able to bring profound changes to their higher education institutions already in the 1910's, through the establishment of university autonomy and the power sharing of students, alumni and faculty in their government. In Brazil law students were extremely active in campaigning for Brazil's entrance in Second World War against the Axis, and during the 1964-1984 military regime the lawyers' association were very involved in the defense of legal human rights.

One of the significant aspects of this involvement, from our perspective, is that it engaged mostly the law professionals, rather than law students. What happened with the Law profession is not altogether different from what happened with the Brazilian higher education faculty and students as a whole. Student mobilization in Brazil was at its highest in the sixties, and has declined consistently since then, after a few years of extremely militant, insurgent activities of student groups in the early seventies. The new phenomenon in the Brazilian higher education institutions is the mobilization of faculty. The new students in the seventies entered a much expanded higher education system, with much more room for people trying to move up from lower social strata, and under the surveillance of an authoritarian state. They were mostly concerned with their individual mobility or short-range group privileges, and never developed the same levels of political participation that were typical of the young counter elites of the previous years. The professionals of the late seventies and eighties, however, are the students of the sixties. They knew about politics, how to get organized, how to express themselves politically. They were also caught in a difficult position from a professional and intellectual point of view, which helps to explain some of their newly found political activism.

Law is still a prestigious profession in Brazil, but it has suffered important transformations in recent times. A law degree ceased to be a precondition, and certainly not a sure ticket, for a political career. It is still true that, if you have the right connections and social origin, a law degree could be useful; but, as the number of degree holders increased, the social value of the title in itself tended to be reduced. Moreover, law as an intellectual discipline was not able to keep up with modern times. There were some attempts to modernize the teaching and contents of law schools in the direction of linking it more with the needs of large private corporations, but it has been so far impossible to develop a field of legal graduate studies and research, as has happened with many other fields<sup>21</sup>. One possible reason for that is the sheer weight of the traditional

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<sup>21</sup> The only, and relatively frustrated experience of modernization of Law studies in Brazil happened in the late sixties in Rio de Janeiro with the cooperation of American specialists, and was directed towards preparing lawyers able to

elites still running the country's most prestigious Law Schools, and who are not open to contributions of modern legal thinking. The social composition of the Law schools have also changed. Now that Latin is not a prerequisite, as it was twenty years ago, it is much easier to get into a Law school than into other professions where previous competence on mathematics or biology is required. And a law degree can make a big difference for a white-collar worker in the public service trying to be promoted. This public is obviously not very concerned with the academic quality of their courses. Finally, the traditional law schools could not benefit from modern social sciences, because these sciences develop in Brazil in opposition to the traditional law schools and its legalistic mentality.

At the end, one could say that lawyers, as a group, moved from a highly prestigious position to one of relative marginality, and it reflected in the thinking of their more articulate representatives: they moved from administrative law to human rights, and from constitutional tinkering to political organization and militancy.

### **Social Sciences: the legal vs. the real country**

Social sciences emerged in Brazil as an effort to show the contrast between the country as defined by its legislation and its hard empirical realities. Paradigmatic in this regard was the opposition between two leading figures, Rui Barbosa and Oliveira Viana. Rui Barbosa was a prolific writer and politician from the turn of the century. His legal competence seemed to be endless, and in 1910 he ran for President against a military officer, Hermes da Fonseca, as a representative of civilian and liberal values. Elections in those years were completely rigged and he lost, but remained as a national symbol of the best the legal thinking could produce.

Oliveira Viana was his nemesis. He refused to look to Brazil and the Brazilians through the glasses of normative law, and tried instead to look at the sociological reality underlying it. He would compare the texture of Brazilian society with the European ones, and conclude that Brazilians lacked the essential ingredients upon which to build a democratic order. His explanations would mostly racial and untenable on modern social sciences grounds; his analysis of how the Brazilian society was organized around family and political clans, and how the country's social organization was based on this reality, are still a classic of Brazilian social sciences. In the thirties, Viana would support the centralizing and modernizing tendencies of the Vargas regime against the liberal thinking of the previous years, which he regarded as part of the legalistic tradition of which Rui Barbosa was the symbol. As an adviser to the Vargas government, he was responsible for many innovations introduced in those years in the fields of social welfare, and opposed the extreme forms of right-wing conservatism which were also present.

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work with the legal questions typical of an advanced capitalist marketplace. Cf. Trubeck, 1971. See also Falcão, 1984. For the education of Brazilian political elites in the 19th century, see Carvalho, 1979.

Oliveira Viana was just one among a group of intellectuals who were extremely active in the thirties but were more or less reduced to silence with the fall of the Vargas regime in 1945. Besides the books they wrote, they also tried to influence directly the course of events, and were attracted by the areas where society could be reached more directly, like education.

In the twenties and thirties education was Brazil's ideological battleground. Brazilian intellectuals, as in the past, continued to come to France, and brought back the ideals of universal, public and laic education. Some, like Anísio Teixeira, came to the United States, got in touch with a view of education which did not square with the Catholic schools which traditionally took care of the children of the Brazilian elite. The Church reacted, and it could rely on a new element it did not have before: the existence of a small group of Catholic intellectuals who read De Maistre, and could mobilize ideas and arguments against what they saw as the threat of liberal, pragmatist, statist, protestant - in any event, non Catholic - educational ideologies.

Mobilization around educational issues led to the formation of a new group of social scientists who became known as "the educators" - Anísio Teixeira, Lourenço Filho and Fernando de Azevedo being the best known. In the early thirties they published a "Manifesto of the Pioneers of the New School", which drew strong reaction from Catholic intellectuals, and the following years they became involved with a series of educational projects carried on by the federal and state governments in São Paulo, Rio de Janeiro, Minas Gerais and Bahia. The ideological issues, in the meantime, started to fade away when the Vargas regime decided to place public education under the Church supervision and allow for religious teaching in public schools. As the educators took up jobs in the expanding educational bureaucracy, they moved from the previously intellectual to more technocratic roles, trying to do in practice what they have been preaching before in public<sup>22</sup>.

The Brazilian education system never fulfilled the educators' expectations, for a combination of social, cultural and institutional factors which are still not completely understood. In the fifties, again under the leadership of Teixeira, a Brazilian Center for Educational Studies was organized in Rio de Janeiro. Its members had already lost the illusion that they could reform the country through education, and engaged in a large program of social studies which could, in fact, help to understand the general conditions of Brazilian society<sup>23</sup>.

This was good for social sciences but not so good for education, which lost its legitimacy as a field for intellectual concern. As the Brazilian educational system expanded throughout the sixties and seventies, schools and graduate programs of education were created, and the professional educators, from a handful in the thirties, became a legion. They are well organized, ill-paid, they fight hard but not very successfully for

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<sup>22</sup> For details, see Schwartzman and others, 1984. The best-known work by Oliveira Viana is Viana, 1949

<sup>23</sup> Cf. Mariani, 1982



their working conditions, and tend to believe that nothing much can be done for Brazilian education before the country's general social and economic conditions are radically changed.

In those years two new types of social sciences started to develop, both around the new University of São Paulo. This University, or more precisely its Faculty of Philosophy, Sciences and Letters, was a creation of that state's elite in a time of intense competition with the Federal government for the country's leadership. It was an ambitious undertaking, to endow that state with a University where the country's future elite would be educated, and which could, on the long run, recover the leadership the state was deemed to have by its economic and entrepreneurial resources. Seen from half a century of hindsight, that project seems to have been fairly successful.

Another project which emerged at the same time, and more or less by same people, was the creation of an independent school of sociology and political science. Its founder was Roberto Simonsen, a combination of successful entrepreneur, business leader and economic historian. The Escola de Sociologia e Política de São Paulo was meant to form entrepreneurs, political leaders, statesmen. It brought a stream of American specialists who started, for the first time in Brazilian history, to talk about quantitative methods, empirical surveys, physical ecology, community studies<sup>24</sup>.

From an intellectual point of view, the Escola de Sociologia was a failure. A large number of sons of the São Paulo elite went through the School, and, were probably influenced by it. A fairly large number of studies on community organization, race relations, immigrant groups, education, and so forth, were carried on. And the studies and research practices brought by its professors became incorporated as standard wisdom in many governmental research and social service agencies, where the utilization of some easy-to-grasp sociological notions were supposedly needed. However, there was never a second generation of intellectuals coming out of that school, and after a few years it drifted towards a condition of seemingly irrecoverable institutional and academic deterioration. American-type sociology, as a discipline or as a profession, never had a future in Brazil. As a discipline, it could not compete with the intellectual charm carried on by the French tradition; professionally, neither the Brazilian state nor its private sector were prepared to accept and make use of the claims of technical prowess the American sociologists were starting to claim for themselves.

In the meantime the University of São Paulo was building its own social sciences program, which was to be much more successful than the one at the Escola de Sociologia e Política. A stream of more or less prestigious French professors were brought in after 1935 - from well known names like Ferdinand Braudel and Claude Lévy Strauss and François Péroux to lesser known like Roger Bastide, Pierre Daffontaines and

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<sup>24</sup> Two names stand out among the Americans who came to the Escola de Sociologia and left a significant influence, Emilio Willems and Donald Pierson. Cf. Willems, 1947, and the still valuable survey of the Brazilian sociological literature by Pierson, 1945.

George Dumas. The presence of this large group coming from Paris created quite a sensation in São Paulo's intellectual circles, and the permanence and research of a few names, like Roger Bastide, would have a lasting impact.

If the French did not bring a coherent sociological perspective, they brought very clear academic standards and implicit assumptions about the nature of intellectual work which were to be followed. They did not hope to prepare business and political leaders, nor did they expect their work to generate socio-political ideologies. Their work tended to be monographic, based on extensive fieldwork, and incorporating intellectual elements of Durkheimian sociology, anthropological functionalism and the new contributions of psychoanalysis. Their Brazilian disciples incorporated these norms, and prepared themselves, perhaps for the first time in Brazilian history, to an academic life.

Florestan Fernandes is certainly the best-known heir of the French tradition in São Paulo, as witnessed by his earlier works on the Tupinambá tribe, followed by a treatise on functionalist methods. His best-known disciples, however, Octávio Ianni and Fernando Henrique Cardoso, took a different path, to be followed years later by their master. In the late fifties, they were active in a group of young sociologists, economists, philosophers and historians who met regularly to read Marx's *Capital* - José Arthur Giannotti, Paulo Singer, Joseph Lowi, Juarez Brandão Lopes, Procópio Cardoso, and several others - and tried to develop a new type of social sciences which would combine academic scholarship with social and political relevance. As Brazil's higher education system expanded, particularly in São Paulo, this group and the work they developed - on the nature of Brazilian society, the characteristics of the slave system, the interpretation of the country's history and, of course, the theory of dependency - became paradigmatic.

The São Paulo group certainly shared and helped to diffuse the Marxist notion that social sciences were destined to produce a blueprint for social redemption, and that it was the social scientist's duty to carry on with this project. How they did it was a question of personal biography. Political involvement on the left was a natural element for these intellectuals, without ever overshadowing their academic and elite roles: With the notable exception of Florestan Fernandes, who had a humble social origin, most of them were socially much closer to the elite than their French intellectual counterparts. When the military came to power, they were easy targets for repression. Deprived of their university chairs, forced sometimes into political or intellectual exile, they kept nevertheless their social prestige and intellectual influence. As democratic rule returned to the country in the mid-eighties, there was no going back to traditional university roles for many in this group. Some had already moved too far and too deep into politics, like Senator Fernando Henrique Cardoso or the Laborer's Party intellectual Francisco Weffort. For others, politicization of academic life, a classic feature of Latin American universities, took precedence: the roles of teacher, writer and political activist blended in one, and the universities were perceived above all as a political battleground.

## The Role of Ideology

The mountain town of Itatiaia, between Rio and São Paulo, was for some time in the early fifties the meeting place for intellectuals of both cities. The Itatiaia group included economists, lawyers, social scientists of different extractions and perceptions about their understanding of Brazil's problems and needs. They all agreed, however, that they had a role to play. They published a few issues of a journal, *Cadernos de Nosso Tempo*, and a few years later, under President Juscelino Kubitschek, were able to organize a governmental institute, the Brazilian Institute for Higher Studies (Instituto Superior de Estudos Brasileiros - ISEB) which was destined to have a large impact in Brazilian intellectual circles.

They were not predominantly academic or university people, but intellectuals without a firm institutional attachment. In spite of its growing economic importance, São Paulo was a provincial city which was able to create a fairly strong university environment; by contrast, Rio de Janeiro was the country's capital, the focus of national attention, and was never able to develop an academic social science similar to the one in São Paulo. Most of the members of the Itatiaia group were from Rio (Hélio Jaguaribe, Guerreiro Ramos, Nelson Werneck Sodré, Evaldo Correia Lima, Cândido Mendes de Almeida and several others) and for them, their social role as intellectuals far outweighed their eventual institutional affiliations. Their role models were not the French professors, but rather intellectuals like Oliveira Vianna who, in the thirties, saw as their task to think and make proposals for the future of the country.

Not surprisingly, a notion most of the group shared was that intellectuals would play a central role in any transformation Brazil was supposed to undergo in the future. They were certainly familiar with Marxism, but their understanding of the role of ideas in society was not the same. For Marxists, ideology as "the knowledge of necessity" was an important element in the development of working-class consciousness, and the intellectuals who decided to join the working class could have a significant, but ultimately secondary role in this process of political awakening. The ISEB group did not talk about the working class as much as they talked about the Brazilian "masses", or "people", and for them ideology, now in a different sense, was indispensable in raising national consciousness in behalf of the country's future. In this new sense, ideology was to be an intellectual construct, a combination of social interpretation, social values and political myth, to be formulated and spread out by intellectuals. If they succeeded, they would certainly be at center stage in guiding the country to its new destiny.

What ideology was that? A key notion was nationalism. In the socialist tradition, nationalism is usually identified with conservative, anti-internationalist values. The ISEB group worked to strip nationalism from its right-wing connotations, and to link Brazil with the emerging and apparently successful third world movement which was bringing together former imperial colonies of Asia and Africa. A nationalist ideology would build an alliance cutting across class divides and unifying the country against those who resisted progress. Progress, or rather "development", was almost the same as industrialization, which was to be achieved by a modernized and interventionist state. The enemies of progress were the supporters of the status quo: the agrarian interests, who did not want the country to industrialize; the traditional politician,

who did not want the state to modernize; the multinational corporations and their local allies, who did not want Brazil to develop an independent and competitive industry; and some sectors of the military and other right wing groups, who did not want Brazil to move away from its strategic alignment with the United States.

ISEB did not survive as a group to the political polarization which prevailed in Brazil in the early sixties. Some of its members decided to try their luck in electoral politics; others moved further and further to the left, approaching the traditional roles of Marxist intellectuals; others still retreated to private jobs, or to work in some government agency. When the military government decided to close the ISEB in 1964, very little of the old Itatiaia group, and nothing of their ambitions of intellectual hegemony, remained.

### Economics and Planning

Brazil did not develop a significant tradition of economic studies, but the notion that the economy should and could be planned was a familiar one. One of the basic assumptions of the Itatiaia group, and not only of them, was that economic development could be achieved by rational planning. The Soviet example of five-year development plans was in the minds of everybody, and by that time the United Nations was helping to spread this notion through its technical assistance programs.

Not surprisingly, discussions about economic planning in Brazil, as elsewhere, has always been clouded by the traditional opposition between economic intervention and capitalist laissez-faire. More specifically, it relates to the question of whether the State should intervene to promote industrialization or, on the contrary, should refrain itself from doing so. These issues, and some of their broader implications, appeared very clearly in the debate that pitted two outstanding Brazilian economists in the mid-forties, Roberto Simonsen (1889-1948) and Eugênio Gudin (1886-1986). The actors are as important as what they had to say<sup>(25)</sup>.

Roberto Simonsen had an engineering education and was a highly successful entrepreneur in São Paulo. He is the author of a classic economic history of Brazil and many other books, the founder of the Escola de Sociologia de São Paulo, and the organizer, in the late twenties, of the first industrialists' organization in the country. He was also the founder of the highly successful National Center for Industrial Training (SENAI), still the most important Brazilian institution for the development of skilled industrial manpower. In 1944 he prepared, for a governmental agency, a document supporting the need for state planning to promote industrialization in Brazil. His suggestions are an obvious reflection of his previous experience as a capitalist whose fortune had grown thanks to close associations with an interventionist state. One looks in vain for an inkling on his part about who should take the responsibility for this undertaking.

Gudin was also an engineer from the Rio de Janeiro Politécnica, and published in 1943 the first Brazilian textbook in modern economics, "The Principles of Monetary Economy". He was the Brazilian representative at the Bretton Woods Conference, and the founder of the Rio de Janeiro first School of Economics. Before this career as an economist, he had worked with foreign railways companies in Brazil, and throughout his long life he remained a staunch supporter of free trade and economic liberalism.

Gudin was offered the chance of commenting on Simonsen's proposal of economic planning, and his criticism was threefold. First he criticized the proposal from a technical point of view, pointing out errors on the way data was used and interpreted. Second, he presented a strong criticism against Simonsen's protectionist ideology, arguing with the standard reasoning of economic liberalism. Thirdly, and more significantly, he presented a blueprint of what should be the organization of the Brazilian government for the management of its economy<sup>25</sup>.

What comes out of Gudin's proposals is that to be a liberal and against planning did not mean to be against the state's intervention in economic matters. For the Brazilian economy to grow, he argued, the country required a monetary authority to control inflation, the exchange rate and to establish the appropriate fiscal policies. Institutional mechanisms which could stimulate capital formation within the country and to attract foreign investments should be devised. Foreign trade and increases in productivity were to be implemented. Systematic collections of economic data were needed to follow the behavior of the national income and the balance of payments. On the long run, a Central Bank should be created to handle the country's monetary policies.

There were no losers in this debate. In the years to follow, Brazil continued to be an interventionist and protectionist state. Several economic plans were devised and approved at the highest possible levels, but comprehensive planning never really took hold. State intervention and protectionism was always sectorial, ad hoc and subject to short term pragmatic considerations. The people who did the planning were the businessmen themselves, in state-controlled fields like energy, transportation, and communications, the specialized engineers, very often with the participation of military people.

In the meantime, Gudin and his group were organizing a center for economics research and teaching at the semi-autonomous Getúlio Vargas Foundation in Rio, and helping to establish the monetary authorities they deemed necessary, which eventually developed into a full-fledged Central Bank. Modern economics was also arriving in Brazil through a different channel, namely the United Nations' Economic Commission for Latin America and its periodical short-term courses for economic planning specialists it provided in Rio de Janeiro and other cities. The ECLAC group shared with Simonsen the notion that Brazil's, and in general Latin America's economic problems were structural in nature, and required not only the control of monetary instruments, but also the actual intervention of the state in the promotion of economic development<sup>26</sup>. The ideological debate between monetarists and structuralists would mark Brazilian intellectual life from the fifties on, and helped to place economics, rather than sociology or political

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<sup>25</sup> Simonsen and Gudin, 1977.

<sup>26</sup> The Brazilian name best associated with ECLA is Celso Furtado, who the Minister of Planning in João Goulart short-lived Presidency in the early 1960's. For his views, see Furtado, 1985.

science, as the social science of choice. With national and international support, fellowships were provided for the more qualified students to go abroad, and graduate and research programs were instituted.

Economists of liberal, or conservative persuasion, were responsible for the modernization of the Brazilian monetary and fiscal institutions in the late sixties, and this helped to provide the basis for the most significant attempt at economic "dirigisme" in Brazilian history, during the Geisel government in the early seventies. It was a combination that did not fit very well into the expected cleavages between left and right in economic and political thought.

The economic achievements of the seventies turned into disaster in the eighties, with an uncontrolled external debt, economic depression, inflation, mounting social inequality and deterioration of urban centers. The military regime and its economic advisers fell into disrepute, and a new civilian regime was instituted in 1985. Now was the time to move away from traditional, liberal economics, and to give new priority to social problems - nutrition, health, education, housing. No professional group, however, was qualified to do the job.

### **Social sciences as professions**

It would be unfair to blame the inherent limitations of the social sciences for the failure of the new civilian government to address properly the country's economic and social problems. A sophisticated, non-orthodox and widely praised monetary reform was carried on in early 1986, and its failure a year later can be attributed to the excess of political expediency on the government's part, rather than to technical flaws in the plan. The absence of long term and efficient social policies can also be attributed to the government's inability to straighten out its outdated, overgrown and patronage- driven bureaucracy, rather than to the lack of knowledge about how to do things right.

There are, however, grounds to doubt whether the appropriate knowledge would be available if the political and institutional conditions for their implementation could be achieved. This is partially due to the fact that, at its best, non-economic social sciences developed in Brazil as a combination of academic scholarship and social criticism, rather than as a social technology amenable to implementation. Scattered, applied knowledge certainly exists throughout the social sciences community, or could be eventually be brought from abroad. But there is no consensus, no agreed upon notions and procedures about what this knowledge would be, or about its legitimacy.

This is a trait of social sciences in general, rather than a peculiar feature of the Brazilian context. In one sense, however, social sciences in Brazil is peculiar, even if not unique: it is the extent to which they got transformed, from a product of the intelligentsia, into the largest sector of the country's post-secondary education.

Economics is an example. Schools of commerce and accounting had existed in Brazil for many years as vocational schools side by side with the more traditional secondary schools, and appealing to people

coming from lower social strata who did not expect to get into a university. The creation of the Faculties of Economics in the thirties was seen by the accountants as an upgrade of their profession, and in fact many of Brazil's contemporary economics courses are outgrowths of old accounting courses. A large social and intellectual gap exists therefore between the large number of undergraduate economics courses leading to professional degrees and the few, highly qualified and modern graduate programs. The situation for business administration and other "applied social sciences" is similar.

Undergraduate higher education in Brazil is patterned on the French model, and all courses are supposed to lead to a professional degree, which creates a difficult position for disciplines like sociology, anthropology or political science. The curriculum created for the São Paulo Escola de Sociologia e Política was adopted as a model for a few other institutions, like the University of Minas Gerais and the Catholic University in Rio de Janeiro, and for some time these courses joined São Paulo as the places where promising social science careers could be started. The students could usually get an administration degree at the same time, and the expectation was that this "new profession" would eventually get as institutionalized and regulated as law or medicine. The courses provided by the School of Philosophy, Sciences and Letters of the University of São Paulo, with their emphasis on research and academic scholarship, could not fit into this pattern, an ambiguity which was solved when this school, and all others patterned on its model, were defined as teachers' schools. As the country's higher education system expanded, "Faculdades de Filosofia", or teachers' schools, spread out as a kind of second or third choice for students who did not make to the most prestigious and established careers, or for those - mostly women - for whom a professional career was not a central concern. Graduates from these courses would eventually end up in actual teaching, and some would organize in attempts to provide their disciplines with the trappings of well established professions. Mostly, however, these courses would provide some kind of liberal arts education, without really leading to organized professional or academic communities.

A final example are the courses of "communication", which are required in Brazil today for the legal practice of journalism. They share with a host of other similar degrees - administration, library sciences, statistics, architecture, economics, social sciences - the lack of consistent cognitive content and a clear professional profile, and, among the ranks of their poorly educated degree holders, the battle for the conquest and preservation of a legally defined niche in the labor market takes precedent over any other consideration.

From another point of view, however, professionals in communication are disputing with the more conventional social scientists for their intellectual roles. In the congressional elections held in Brazil in 1986, journalists and TV professionals got elected in great numbers, while social scientists who ventured into open politics were systematically defeated. These results confirm that, in societies where mass communications prevail, competence with the media, rather than the message, is the key to public recognition. What the media specialists are doing in Brazil today is a continuation of what literary, music and theater people have done for a long time: to use their well established public images to spread political

and ideological values. If this tendency remains, it will have a definite impact in the redefinition of some of the social scientists' social roles.

## **Conclusions**

A fairly generalized pattern can be inferred from this quick and admittedly incomplete overview. In contrast with societies where modern knowledge and professions grow together with new and rising social groups, in societies like Brazil they tend to begin close to the top of the social pyramid. The consequence is the development of modernizing counter-elites that face the opposition, not only of established power holders, but also from other social groups with vested interests in the more traditional social order and its values.

Sometimes the sheer prestige of the new forms of knowledge, or what they can actually achieve, is enough to place their carriers in the positions of power and authority they assume they are entitled to. When this does not happen, the new knowledge may change into ideology, and be used as a political weapon.

The next stage is institutionalization. Schools are created, professions are established, legal rights and privileges are sometimes attached to them. The number of people with access to new knowledge increases, and there is an effort to give it a more defined place in the social division of labor. The final stage may be called "entrenchment". As new professions grow and include disproportionately larger social groups, or as they fail in their attempt at firm professionalization, their market value diminishes, and their collective behavior becomes defensive. Ideology takes the lead again, but now mostly as collective self-protection, rather than as alternative world visions or proposals for social change. It may be difficult to distinguish among the two at first glance, since both are politically minded and ideological. But social reformers come usually in small groups, like the educators in the thirties, and their intellectual production is always directed outwards, in an effort to convince society of the value of their ideas and contributions; ideological entrenchment happens in much larger communities, and is directed mostly inwards, in an effort to rally the ranks and protect the group against outside aggression. On the long run, entrenchment can be self-defeating, and lead to loss of social standing and de-institutionalization for the group.

Not all types of knowledge follow these stages in the same way, and in many situations there are conflicts between groups located at different stages of this sequence. Stratification occurs not only among professions, but also within them, and the cleavage between a "high" and a "low clergy" is one of the main features of Brazilian higher education today. An overview of the Brazilian social sciences today from the standpoint of its best graduate programs and research groups would provide picture which is very different



from the one which derives from the view of social sciences and humanities as professions, with its almost 800 thousand students in almost two thousand undergraduate courses<sup>27</sup>.

One can assume that these external conditions have significant implications for the knowledge contents of different disciplines. One could expect that, as new knowledge becomes institutionalized as a profession, its technical content increases; if what prevails is academic institutionalization, scholarship contents are stressed; if it works as ideology, intellectual simplicity, comprehensiveness and easiness to grasp tend to dominate. The political sign attached to the carriers of the new knowledge vary according these conditions, and are subject to unexpected reversals.

Finally, one could speculate about the conditions that favor the "French" vs. the more "British" versions of new knowledge, and their political and epistemological implications. It is fairly clear that the "French" tradition favors its political and ideological utilization, and may sometimes hinder the development of autonomous and self-regulated intellectual communities, without which knowledge contents can be at risk. There are, however, enough experiences that do not fit easily into this kind of generalization - Germany, the Scandinavian countries, Japan - to warn us not to carry this conclusion too far. In short, new knowledge and the new professions are used in ways often quite unrelated with their actual knowledge content. Because of this, there is sometimes a tendency to say that only their social roles and political implications are significant, while knowledge content is sheer ideological self-justification. I believe, however, that this tendency is basically a consequence of the stage of entrenchment that dominates modern social sciences in many countries. More to the point, I believe that the development of appropriate knowledge contents is an important social need, which can grow quite differently in different soils, and can be fostered if we can understand the ways in which modern knowledge spreads out on social space and time.

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Notes

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<sup>27</sup> On Brazilian higher education, cf. S. Schwartzman, 1987; on the social sciences, cf. Packenham, 1986.

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